RCHP-135US

Appln. No.: 10/567,872

Amendment Dated October 29, 2010

Reply to Office Action of September 8, 2010

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (Currently amended) A composition comprising a metal surface chemically coordinated to a surface modifier, a gene transfer vector, and a modified protein, wherein the modified protein comprises a CAR protein or a fragment of a CAR protein, wherein the gene transfer vector is bound to the CAR protein or the fragment of the CAR protein, and the modified CAR protein or the fragment of the surface modifier directly or via a linker.
- (Canceled)
- 3. (Currently amended) The composition of claim 1, wherein the modified <u>CAR</u> protein or the fragment of the <u>CAR</u> protein is covalently bound to the surface modifier through a thiol residue and a linker.
- 4. 7. (Canceled)
- 8. (Previously presented) The composition of claim 1, wherein the metal surface is a surface of a medical device.
- 9. (Original) The composition of claim 8, wherein the medical device is selected from the group consisting of a stent, a heart valve, a wire suture, a joint replacement, a urinary dilator, an orthopedic dilator, a catheter and an endotracheal tube.
- 10. (Original) The composition of claim 8, wherein the medical device is at least one of an internal device and an external device.
- 11. 16. (Canceled)
- 17. (Withdrawn currently amended) A method for preparing the composition of claim 1, comprising: (a) providing a protein; (b) modifying the protein with a reagent to contain a reactive group, thereby yielding a modified protein; (c) providing a surface; (d) treating the surface with a surface modifier comprising a linker and a functional group; (e) reacting the modified protein with the functional group on the surface in order to covalently bind the

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modified protein to the surface via the linker; and (f) binding a gene transfer vector to the modified protein, wherein the protein is a CAR protein or a fragment of a CAR protein.

- 18. (Canceled)
- 19. (Withdrawn currently amended) The method of claim <u>17</u> 18, wherein the fragment of the CAR protein is an extracellular domain of the CAR protein or an immunoglobulin D1 domain of the CAR protein.
- 20. (Withdrawn) The method of claim 17, wherein the protein is a fusion protein.
- 21. (Withdrawn currently amended) The method of claim <u>17</u> 20, wherein the fusion protein comprises a fragment of <u>the</u> a CAR protein <u>is fused</u> ligated to a receptor targeting ligand by intein-mediated protein ligation.
- 22. (Withdrawn currently amended) The method of claim $\underline{17}$ $\underline{21}$, wherein the fragment of the CAR protein is an extracellular domain of the CAR protein or an immunoglobulin D1 domain of the CAR protein.
- 23. (Withdrawn) The method of claim 21, wherein the receptor targeting ligand is selected from the group consisting of apolipoprotein E, transferring, a vascular endothelial growth factor, a transforming growth factor-beta, a fibroblast growth factor, an RGD containing peptide and folic acid.
- 24. (Withdrawn) The method of claim 17, wherein the reagent is a cysteine and the reactive group is a thiol group or an avidin-biotin affinity construct.
- 25. (Withdrawn) The method of claim 17, wherein the surface is a surface of a medical device.
- 26. (Withdrawn) The method of claim 25, wherein the medical device is selected from the group consisting of a stent, a heart valve, a wire suture, a joint replacement, a urinary dilator, an orthopedic dilator, a catheter and a endotracheal tube.
- 27. (Withdrawn) The method of claim 25, wherein the medical device is at least one of an internal device and an external device.

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28. (Withdrawn) The method of claim 17, wherein the surface modifier is polyallylamine bisphosphonate, the linker is an entity containing a reactive succinimide and a pyridyl-dithiol group, and the functional group is selected from the group consisting of an amino group, a sulfhydryl group, biotin reactive succinimides, epoxy-residues and aldehyde functionalities.

29. - 34. (Canceled)

- 35. (Currently amended) The composition of claim 1, wherein the modified protein comprises a fragment of the a CAR protein is fused to a receptor targeting ligand.
- 36. (Currently amended) The composition of claim $\underline{1}$ 35, wherein the fragment of the CAR protein is an extracellular domain of the CAR protein or an immunoglobulin D1 domain of the CAR protein.
- 37. (Currently amended) The composition of claim 35, wherein the modified protein further comprises a receptor targeting ligand is selected from the group consisting of apolipoprotein E, transferring, a vascular endothelial growth factor, a transforming growth factor-beta, a fibroblast growth factor, an RGD containing peptide, and folic acid.

38. - 40. (Canceled)

- 41. (New) The composition of claim 1, wherein the surface modifier is selected from the group consisting of polybisphosphonates, aminobisphosphonates and polyamines.
- 42. (Withdrawn new) The method of claim 17, wherein the surface modifier is selected from the group consisting of polybisphosphonates, aminobisphosphonates and polyamines.